

ABSTRACT OF THE DISCLOSURE

One-way clutches having different numbers of pawls (1006, 1007) and pockets in a "vernier" arrangement minimize relative rotation between the two clutch halves (101, 102) in the engagement direction. Noise is also reduced. Directionally sensitive biasing elements (1008) rather than springs are used in one-way clutches for extending or retracting inertially balanced swivelling pawls (1006,1007). In another embodiment, a reversible one-way clutch uses a gear train to drive a worm screw synchronized with teeth on a driven worm gear, when freewheeling. Controlled backlash places the worm in either a contact mode (when engagement occurs) or a non-contact (disengaged) mode when driven in an opposite direction.